

The Rufford Foundation

Final Report

Congratulations on the completion of your project that was supported by The Rufford Foundation.

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. The Final Report must be sent in **word format** and not PDF format or any other format. We understand that projects often do not follow the predicted course but knowledge of your experiences is valuable to us and others who may be undertaking similar work. Please be as honest as you can in answering the questions – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Please complete the form in English and be as clear and concise as you can. Please note that the information may be edited for clarity. We will ask for further information if required. If you have any other materials produced by the project, particularly a few relevant photographs, please send these to us separately.

Please submit your final report to jane@rufford.org.

Thank you for your help.

Josh Cole, Grants Director

Grant Recipient Details	
Your name	Rodet Rodriguez Silva
Project title	An approach to freshwater fish knowledge in western Cuba: environmental education in rural communities for conservation both our fish and their habitats
RSG reference	12925-2
Reporting period	January-December, 2014
Amount of grant	£6000
Your email address	rodet@ecologia.cu and rodetrodriguezsilva@gmail.cu
Date of this report	December 22 th , 2014

1. Please indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	Not achieved	Partially achieved	Fully achieved	Comments
Provide ecological information and determine current threats of freshwater fish in western Cuba			X	During each field trip were recorded environmental variables to determine ecological requirements of native fish in their habitat and, at the same time, were assessed clear threats for their conservation. Conservation authorities were informed about particular situations through an official report regarding the current status of fish populations and their habitats.
Improve a training programme in rural communities for conservation both fish and their habitats			X	Were carry out regular conservation activities in each visited locality, involving both local communities and technical personnel, to show how we can protect our native fish fauna and related habitats.

2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).

There are not notable difficulties to carry out this project. However, I want to emphasise in a problem that face up most of Cuban researchers which is related with the lack of specialising shops in field equipment in Cuba. Most field equipment required for the projects is bought abroad (sometimes through foreign colleagues).

3. Briefly describe the three most important outcomes of your project.

1. The information resulting of the first goal of the project represent an important tool for the conservation. In each area where the project was developed, conservation authorities are using our results to carry out management actions for the conservation of indigenous fish species. In addition, there are some implemented measures derived of the project aimed to minimise the effect of fish alien species as the main threat on endemic fish.
2. Conservation workers belonging to Sierra del Rosario Biosphere Reserve, Cienaga de Zapata National Park and Los Indios Ecological Reserve were trained through the project in the identification of native fish species, ecological requirements of them and management of their threats to ensure long term conservation actions.
3. Local communities, mainly children, were involved in the project directly. Using didactic materials resulting of the project such as posters, fish species identification guides, conservation talks and others, were motivated future local team members to continue the conservation of fish and linked habitats.

4. Briefly describe the involvement of local communities and how they have benefitted from the project (if relevant).

Local communities from each locality where the project was executed were closely related to them. Precisely, one of the project's objectives included training and didactic activities carried out in rural communities. These activities contributed to get better knowledge about Cuban native fish and their current threats in natural environments. Without doubt after this project the education of local communities in these subjects is notably superior.

5. Are there any plans to continue this work?

Yes, there are. This project, executed thanks to the financial support of The Rufford Foundation, disclosed some critical points which will be resolve for the conservation of Cuban freshwater fish and linked habitats in the future. These elements are stated as the important next steps in the point 9 in this Final Report.

6. How do you plan to share the results of your work with others?

The results derived of this work have been sharing with others by dissimilar ways. Were gave conservation talks in rural communities showing main results of the project. In addition, educative materials produced showed to technical staff and local communities, natural values located in their living areas as well as some actions to preserve these values. On the other hand, a report regarding the current status of fish populations and their habitats was given to conservation authorities to implement management actions. One scientific manuscript derived from this project was sent to publish in a scientific journal and other manuscript is under revision to make public on next months.

7. Timescale: Over what period was The Rufford Foundation grant used? How does this compare to the anticipated or actual length of the project?

The main activities regarding to the project occurred within a 12-month period as originally planned (from January to December, 2014). All foreseeable results of this project were obtained in this time (record of environmental variables and threats, as well as training activities). However, the publication of scientific articles will delay a 2-4 months period because the revision process required by the journal editorial board.

8. Budget: Please provide a breakdown of budgeted versus actual expenditure and the reasons for any differences. All figures should be in £ sterling, indicating the local exchange rate used.

Item	Budgeted Amount	Actual Amount	Difference	Comments
4 Vari-Case Dissecting Kits	£ 36	£ 27	£ 9	Were bought three dissecting kits instead of four because we used only one kit for each locality.
2 Monofilament Gill Nets	£ 250	£ 300	£ -50	In this case was necessary to buy one additional gill net (other kind of gill net) because once of them had been damage so much before to finish the

				field work.
4 Baitwell Nets	£ 72	£ 72	£ 0	
3 Replacing Nets	£ 16	£ 16	£ 0	
Containers PP 300 ml	£ 36	£ 50	£ -14	In this case were necessary more containers to preserve stomach contents of alien fish species at the field for further analysis.
All-Weather Copier Paper (200 white sheets)	£ 28	£ 30	£ -2	
Resistall Paper for Labels (2 packs of 100)	£ 48	£ 72	£ -24	We bought additional paper for labels (1 more pack) because was needed to identify all material collected at the field (water samples, stomach contents, etc.)
Diving Boots (3 pairs)	£ 83	£ 83	£ 0	
Men's Hiking Boots (3 pairs)	£210	£ 195	£ 15	We found a cheaper offer to buy this item (£ 65 per pair)
Insect Repellent (10 bottles)	£ 50	£ 75	£ -25	Was necessary to buy additional insect repellent bottles because in some field trips members of local communities accompany us to the field activities.
Ticket Travel Costs	£ 1200	£ 900	£ 300	We save some money in this item because our institutions help to the project giving transportation service in some field trips.
Diesel	£ 500	£ 650	£ -150	Was necessary to buy additional diesel for the transportation inside each work locality where the distances between sampled points was above 10 kilometers.
Food	£ 800	£ 500	£ 300	We save some money in this item because we had the opportunity to work together with other RSG recipient. By this way associated costs to this item were shared and reduced consequently.
1 Digital Camera	£ 400	£ 390	£ 10	
1 Laser Printer and Toners	£ 300	£ 200	£ 100	Was bought an ink printer instead a laser printer which is more economical producing educative materials.
1 Video Beam Projector Led	£ 200	£ 195	£ 5	
Educative materials publishing	£ 1000	£ 1500	£ -500	Save money in travel costs and food expenses, was used to produce additional educative materials making better the training program in rural communities.
Office materials	£ 300	£ 360	£ -60	
Aquarium Supplies	£ 200	£ 190	£ 10	

Contingences	£ 250	£ 180	£ 70	There were not considerable unforeseen costs associated to this project. Save money was used to complete costs associated to some field equipments.
Total	£ 5979	£ 5985	£ -6	

9. Looking ahead, what do you feel are the important next steps?

In the course of this project were identified some crucial points that will be considered as next steps in future works:

- Alien fish species were identified as a real threat for the conservation of native fish fauna in western Cuba, therefore is crucial to assess the predation impact of foreign species over indigenous fish in the whole Cuban archipelago.
- Training actions to conservation of native fish and their habitat will be very important in the immediate future in view of the fact that the knowledge about Cuban freshwater fish is limited at this moment.
- Will be needed to start a pilot program of captivity breeding for some endemic fish with critical conservation situations. This program must involve local communities as the principal component for their implementation.

10. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the RSGF receive any publicity during the course of your work?

The Rufford Foundation logo was used in the presentations addressed to conservation authorities, technical staff and local communities from each area, showing them that The Rufford Foundation provided financial support for obtain the results of this project. The logo was used too in posters and species identification guides generated during the project as well as in an official report given to Cuban wildlife conservation authorities. In addition, we thanks to The Rufford Foundation for financial support in a scientific publication submitted recently to a journal.

11. Any other comments?

In the course of this project I had the opportunity to work together with other RSG recipient, Tomas Michel Rodriguez Cabrera, who is conducting a project related with the conservation of endemic scorpions from western Cuba. This was an extraordinary opportunity to network with other Cuban colleague which is working in the wildlife conservation. In addition, field activities developed jointly made it possible to save money which was used to produce additional educative materials and improve activities related with education in rural communities.

I wish to thank, jointly with my work team, to The Rufford Foundation for support this project. We are very pleased to work with The Rufford Foundation once again and eager to continue working with the foundation in other projects in the future. Besides we want to give our most sincere thanks to the local communities involved in the project, conservation authorities and technical conservation staff in each area. Please do not hesitate to contact with me if you need photographs, further information or any other materials in relation with the project